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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,779	06/27/2003	Masao Imamura	HAT-024-USA-P	6387
27955	7590	10/31/2005		
TOWNSEND & BANTA c/o PORTFOLIO IP PO BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER KIM, PAUL D	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,779

Applicant(s)

IMAMURA, MASAO

Examiner

Paul D. Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This office action is a response to the restriction requirement filed on 9/15/2005.

Response to the Restriction Requirement

1. Applicant's election without traverse of Group II, claims 3 and 4, in the reply filed on 9/15/2005 is acknowledged.
2. The non-elect claims 1 and 2 are cancelled in the reply filed on 9/15/2005.

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

4. Figure 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct

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any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --A METHOD OF MANUFACTURING A SUBSTRATE OF A ROTARY ENCODER--.

Claim Objections

6. Claims 3-5 are objected to because of the following informalities:

Re. Claim 3: The phrase "its" as recited in line 3 needs to be changed to --the resin substrate--.

Re. Claim 4: The phrase "the front surface" as recited in line 7 appears to be --a front surface--.

The phrase "its" as recited in line 25 needs to be changed to --the resin substrate--.

Re. Claim 5: There are brackets and underlines in line 1 and line 37. Since claim 5 is a new claim, the brackets and underlines should be removed.

The phrase "the front surface" as recited in line 6 appears to be --a front surface--.

The phrase "its" as recited in line 36 needs to be changed to –the resin substrate--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 3-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re. Claim 3: The phrase "a resin varnish applying step comprising applying and surprinting resin varnish into a concave portion of the ring-shaped comb electrode pattern after the etching, so as to remove excessive resin varnish from the surface" as recited in lines 9-11 renders the claim vague and indefinite. It is unclear as to apply and surprint the resin varnish only the concave portion of the ring-shaped comb electrode pattern or the concave portion of the substrate including the concave portion of the ring-shaped comb electrode pattern after the etching. In addition, the phrase "the surface" as recited in line 11 renders vague and indefinite. It is unclear as to which surface is indicated. Is it the front surface or the back surface or the ring-shaped comb electrode pattern or electrode patterns? Clarification is required.

Re. Claim 4: The phrase "a substrate having a front center hole, a back surface, an outermost periphery, first and second ring-shaped electrode patterns formed on the

surface concentrically around the center hole” as recited in line 2-4 renders vague and indefinite. It is unclear as to where the front and back are indicated because the center hole is located at the front and the first and second ring-shaped electrode patterns formed on the back surface around the center hole. Clarification is required.

The phrase “a resin varnish applying step comprising applying and surprinting resin varnish into a concave portion of the ring-shaped comb electrode pattern after the etching, so as to remove excessive resin varnish from the surface” as recited in lines 31-33 renders the claim vague and indefinite. It is unclear as to apply and surprint the resin varnish only the concave portion of the ring-shaped comb electrode pattern or the concave portion of the substrate including the concave portion of the ring-shaped comb electrode pattern after the etching. In addition, the phrase “the surface” as recited in line 33 renders vague and indefinite. It is unclear as to which surface is indicated. Is it the front surface or the back surface or the ring-shaped comb electrode pattern or electrode patterns? Clarification is required.

Re. Claim 5: The phrase “a substrate having a front center hole, a back surface, an outermost periphery, first and second ring-shaped electrode patterns formed on the surface concentrically around the center hole” as recited inline 2-3 renders vague and indefinite. It is unclear as to where the front and back are indicated because the center hole is located at the front and the first and second ring-shaped electrode patterns formed on the back surface around the center hole. Clarification is required.

The phrase “a resin varnish applying step comprising applying and surprinting resin varnish into a concave portion of the ring-shaped comb electrode pattern after the

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etching, so as to remove excessive resin varnish from the surface” as recited in lines 42-44 renders the claim vague and indefinite. It is unclear as to apply and surprint the resin varnish only the concave portion of the ring-shaped comb electrode pattern or the concave portion of the substrate including the concave portion of the ring-shaped comb electrode pattern after the etching. In addition, the phrase “the surface” as recited in line 44 renders vague and indefinite. It is unclear as to which surface is indicated. Is it the front surface or the back surface or the ring-shaped comb electrode pattern or electrode patterns? Clarification is required.

Allowable Subject Matter

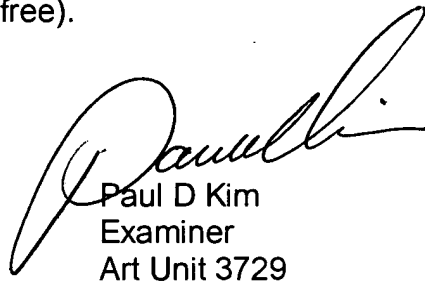
9. Claims 3-5 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Friday between 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim
Examiner
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